IN THE CLAIMS:

1. (Currently amended) A decontamination apparatus comprising:

a source of a cleaning fluid;

a mist generator having an input flow of the cleaning fluid and an output flow of a mist of the cleaning fluid at substantially one atmosphere ambient pressure; and

an activator positioned to activate the mist of the cleaning fluid to produce an activated cleaning fluid mist, wherein the activator produces activating energy selected from the group consisting of electric energy and photonic energy.

2. (Original) The apparatus of claim 1, wherein the source of the cleaning fluid comprises a source of hydrogen peroxide.

3. (Original) The apparatus of claim 1, wherein the source of the cleaning fluid comprises a source of an activatable species from the group consisting of hydrogen peroxide, peracetic acid, sodium percarbonate, and gluteraldehyde.

4. (Original) The apparatus of claim 1, wherein the source of the cleaning fluid further comprises a source of a promoting species selected from the group consisting of ethylenediaminetetraacetate, isopropyl alcohol, citric acid, lactic acid, and oxalic acid, and mixtures thereof.

5. (Original) The apparatus of claim 1, wherein the source of the cleaning fluid further comprises a source of a promoting species selected from the group consisting of an alcohol, and enzyme, a fatty acid, an acid, and a chelating agent, and mixtures thereof.

6. (Original) The apparatus of claim 1, wherein the mist generator comprises of nebulizer.

7. (Original) The apparatus of claim 1, wherein the mist generator comprises a spray nozzle.

8. (Canceled)

9. (Original) The apparatus of claim 1, wherein the activator produces activating energy selected from the group consisting of an AC electric field, an AC arc, a DC electric field, a pulsed DC electric field, a DC arc, an electron beam, an ion beam, a microwave beam, a radio frequency beam, and an ultraviolet beam.

10. (Original) The apparatus of claim 1, wherein the activator includes a tuner that tunes the activating energy.

11. (Original) The apparatus of claim 1, wherein the mist generator and the activator are disposed proximally, so that the activator activates the mist of the cleaning fluid as it leaves the mist generator.

12. (Original) The apparatus of claim 1, wherein the activator is located remotely from the mist generator.

13. (Original) The apparatus of claim 1, wherein the apparatus further includes an enclosure into which the mist of the cleaning fluid is directed by the mist generator.

14. (Original) The apparatus of claim 1, wherein the apparatus has no enclosure into which the mist is directed by the mist generator.

15. (Original) A method for performing decontamination, comprising the steps of producing an activated cleaning fluid mist wherein at least a portion of the activated cleaning fluid mist is in an activated state of substantially one atmosphere ambient pressure; and

contacting the activated cleaning fluid mist to a location to be decontaminated.

16. (Original) The method of claim 15, wherein the decontamination apparatus further includes an enclosure, and wherein the step of contacting occurs within the enclosure.

17. (Original) The method of claim 15, wherein the step of contacting occurs within an enclosed space.

18. (Original) The method of claim 15, wherein the step of contacting occurs in an unenclosed space.

19. (Original) The method of claim 15, wherein the step of producing includes the step of:

providing a decontamination apparatus comprising;

a source of a cleaning fluid,

a mist generator having an input flow of the cleaning fluid and an output flow of a mist of the cleaning fluid at substantially one atmosphere ambient pressure, and

an activator positioned to activate the mist of the cleaning fluid to produce the activated cleaning fluid mist.